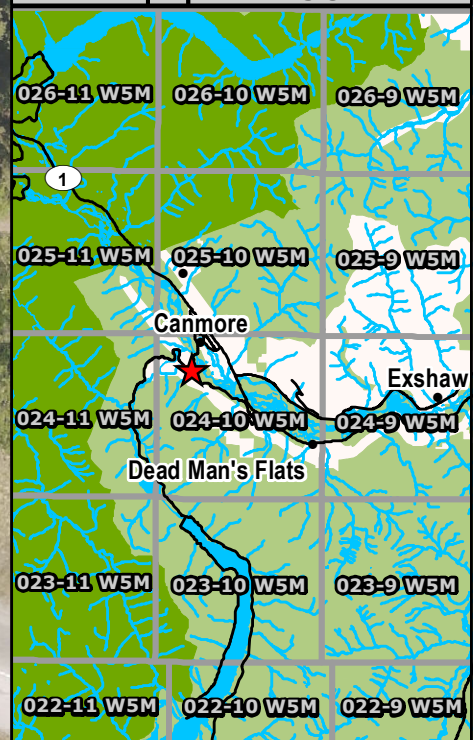
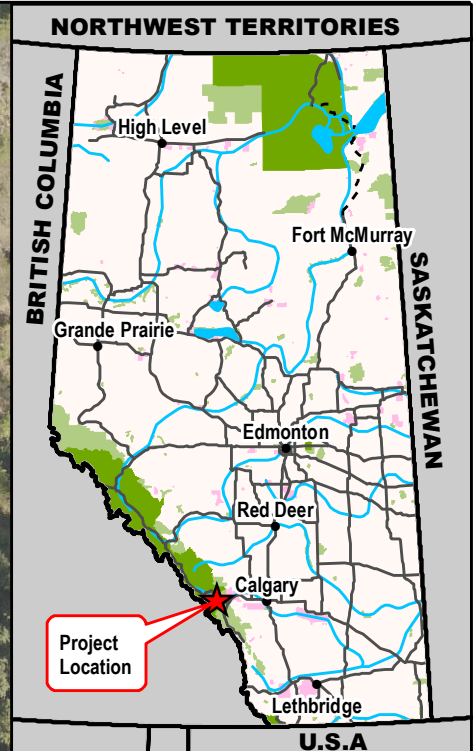


SITE NUMBER AND NAME: S012 Spray Lakes Road		HIGHWAY & KM: 742:02, 4.319	PREVIOUS INSPECTION DATE: May 1, 2018	INSPECTION DATE: May 7, 2019
LEGAL DESCRIPTION 11-29-024-10 W5M	NAD 83 COORDINATES: UTM Northing Easting 11 5659724 614296		RISK ASSESMENT: PF: 11 CF: 7 TOTAL: 77	
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 1145 (north); 1141 (south), (Ref No. 67429980)			CONTRACTOR MAINTENANCE AREA (CMA): 28	

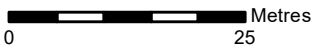
SUMMARY OF SITE INSTRUMENTATION: None	INSPECTED BY: Chris Gräpel (KCB) Chris Morgan (KCB) Renato Macciotta (KCB) Roger Skirrow (AT) Alex Frotten (AT) Nicolas Ropchan (AT)
LAST READING DATE: N/A	
PRIMARY SITE ISSUE: Voids from old coal mines under road, 3.5 to 6 m below highway.	
APPROXIMATE DIMENSIONS: Coal mine voids present below 80 to 100 m of highway and below adjacent areas	
DATE OF ANY REMEDIAL ACTION: Geophysical investigation completed in September 2017, followed by drilling investigation in April 2018. Final tender and drawings submitted for tendering in June 2019.	

ITEM	CONDITION EXISTS		DESCRIPTION AND LOCATION	NOTICABLE CHANGE FROM LAST INSPECTION	
	YES	NO		YES	NO
Pavement Distress	X		Previously patched headboxes have settled slightly. Pavement cracking over entire width of highway		X
Slope Movement		X	Shallow bedrock present at site, bedrock exposed in backslope to the south of the highway.		X
Erosion		X			X
Seepage		X			X
Culvert Distress		X	Depression noted in ditch at outlet of culvert.		X

COMMENTS
No observable changes to the site when compared to 2018 inspection.
Pavement surface has some subtle depressions, indicating movement of subgrade. Bedrock is exposed to the south of the subject site. Subtle depression noted at outlet of culvert to east of site, may indicate infiltration of culvert discharge into an underlying void.
Settlement of flush mounted head boxes and void formation between head box and asphalt may indicate seepage of water from pavement surface into void via boreholes is promoting settlement of road surface and deformation of asphalt around boreholes.
The locations of the 2018 boreholes are shown on Figure 1. Repair works are proposed for 2019 construction.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Legend

- 2018 Borehole
- Borehole (metal cap)
- Borehole (filled)
- Borehole (covered by asphalt)
- Culvert
- Void

NOTES:
 1. HORIZONTAL DATUM: NAD83
 2. GRID ZONE: UTM Zone 11N
 3. IMAGE SOURCE: World Imagery, ESRI ArcGIS Online.
 Town of Canmore 2017 Imagery

CLIENT

PROJECT	SOUTHERN REGION GEOHAZARD RISK MANAGEMENT PROGRAM	
TITLE	Site Plan S012 - Canmore Spray Lakes Road Hwy 742:02, km 4.319	
SCALE	PROJECT No.	FIG No.
1:800	A05115A03	1

Time: 16:22:35 PM
 Date: May 29, 2019
 File: Z:\A\EDM\A05115A03\ABT Southern Region GRMP\A00 Drawings\2019\2 Section BIM\XDS\012_190529.mxd

Photo 1 Patched boreholes in pavement. Photo was taken facing north on May 7, 2019.



Photo 2 Pavement cracking and flush-mounted headbox for an old borehole. Photo taken facing west on May 7, 2019.

